

REMARKS**I. General**

Claims 1-20 were pending in the present application, and all of the pending claims are rejected in the current Office Action (mailed October 4, 2004). The outstanding issues raised in the current Office Action are:

- Claim 19 is rejected under the judicially created doctrine of double patenting, as being anticipated by claims 17-18 of U.S. Patent No. 6,539,457 issued to Mulla et al. (hereinafter "*Mulla*");

- Claims 1-4, 10-14, and 19-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,930,819 issued to Hetherington et al (hereinafter "*Hetherington*"); and

- Claims 1-3, 5-9, 11-12, and 14-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,711,654 issued to Rangan (hereinafter "*Rangan*").

In response, Applicant respectfully traverses the outstanding claim rejections, and requests reconsideration and withdrawal thereof in light of the amendments and remarks presented herein.

II. Amendments

Claims 1, 11, and 19 are amended and new claims 21-23 are added herein. Support for these amendments and newly presented claims can be found in the specification of the present application at, *inter alia*, paragraphs 37-41 on pages 14-15. Thus, no new matter is added by these claim amendments and newly presented claims.

III. Double Patenting Rejection

Claim 19 stands rejected under the judicially created doctrine of double patenting, as being anticipated by claims 17-18 of *Mulla*. As described above, claim 19 is amended herein. Applicant respectfully submits that claims 17-18 of *Mulla* do not anticipate the newly added limitations of claim 19. Therefore, the double patenting rejection of claim 19 should be withdrawn.

IV. Rejections Under 35 U.S.C. § 102

Claims 1-4, 10-14, and 19-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Hetherington*, and claims 1-3, 5-9, 11-12, and 14-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Rangan*. Applicant respectfully traverses these rejections as provided further below.

To anticipate a claim under 35 U.S.C. § 102, a single reference must teach every element of the claim, *see* M.P.E.P. § 2131. Applicant respectfully submits that neither *Hetherington* nor *Rangan* teaches each and every element of claims 1-20.

Independent Claim 1

Neither *Hetherington* nor *Rangan* teaches all elements of independent claim 1, as amended herein. Claim 1, as amended herein, recites in part “circuitry operable to determine a bank conflict for pending access requests for said cache memory structure, wherein said circuitry is operable to determine said bank conflict using bits of virtual addresses to be accessed by said pending access requests” (emphasis added).

Neither *Hetherington* nor *Rangan* teach using bits of virtual addresses for determining bank conflicts. Thus, claim 1, as amended herein, is not anticipated by either of these references. Accordingly, the § 102 rejections of claim 1 over these references should be withdrawn.

Independent Claim 11

Neither *Hetherington* nor *Rangan* teaches all elements of independent claim 11, as amended herein. Claim 11, as amended herein, recites in part “determining at least one access request in said pending request queue that has a bank conflict, said determining based on bits of a virtual address to be accessed by said at least one access request” (emphasis added).

Neither *Hetherington* nor *Rangan* teach using determining a bank conflict based on a virtual address. Thus, claim 11, as amended herein, is not anticipated by either of these

references. Accordingly, the § 102 rejections of claim 11 over these references should be withdrawn.

Independent Claim 19

Neither *Hetherington* nor *Rangan* teaches all elements of independent claim 19, as amended herein. Claim 19, as amended herein, recites in part “means for determining whether a bank conflict exists for a pending access request, wherein said determining is performed by said determining means before a virtual address to be accessed by said pending access request is translated into a physical address for said memory structure” (emphasis added).

Neither *Hetherington* nor *Rangan* teach determining whether a bank conflict exists for a pending access request before translating a virtual address of the pending access request into a physical address. Thus, claim 19, as amended herein, is not anticipated by either of these references. Accordingly, the § 102 rejections of claim 19 over these references should be withdrawn.

Dependent Claims

In view of the above, Applicant respectfully submits that independent claims 1, 11, and 19 are not anticipated under 35 U.S.C. § 102 over either *Hetherington* or *Rangan*. Further, each of dependent claims 2-10, 12-18, and 20 depend either directly or indirectly from one of independent claims 1, 11, and 19, and thus inherit all limitations of the respective independent claim from which they depend. It is respectfully submitted that dependent claims 2-10, 12-18, and 20 are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the respective base claim from which they depend).

V. Newly Added Claims

Claims 21-23 are added herein. Claims 21 and 22 depend from independent claim 1, and claim 23 depends from independent claim 11. It is respectfully submitted that dependent claims 21-23 are allowable not only because of their dependency from their respective

independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the respective base claim from which they depend).

VI. Conclusion

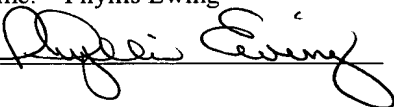
In view of the above, Applicant believes the pending application is in condition for allowance.

The required fee for this response is enclosed. If any additional fee is due, please charge Deposit Account No. 08-2025, under Order No. 10971429-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 482745168US in an envelope addressed to: M/S Amendment, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: January 3, 2005

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